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A Dissertation
on
Dysentery
submitted to the examination
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Medical faculty of the University
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For the degree of M.D.
by Hosea Tithian
of N. Jersey.

A dissertation, on Dysentery.

This is a disease in which the intestines are with difficulty moved and when they are, the discharges are chiefly mucus, at the same time the natural feces are retained.

Frequently the mucous discharges are streaked with blood and are characterized by severe griping pains and tenesmus, very often the discharges appear of an albuminous nature or very thin, and watery, and occasionally of a frothy appearance and mixed with this - something like hard lumps of cheese, or accompanying these, a membrane which resembles the internal coat of the intestines; and some times pure blood is voided.

When the discharges take place they are very frequent and it is very seldom that the natural feces appear in them, and when they do it is in a compact and hardened

form denominated scybala. It was common among the ancients to seek for the more remote causes of this disease as, an acrimony of the fluids of ingesta of the bile and other abdominal secretions. Sydenham considers it a febrile disease directed to the intestines and thought it owing to a morbid matter brought to the intestines by the mesenteric arteries. Akenzie called dysentery a rheumatism of the alimentary canal, and thought dysentery and rheumatism the same. Cullen defines it a contagious fever, in which the patient has frequent stools streaked with blood, But at the present period of medical science it is not considered as such except when it puts on a Typhoid type and when it assumes this form it is in damp crowded places as in camps, gaols, hospitals and in armies - where the soldiers have been on long marches - and exposed to heavy rains and in those places

it generally appears as an epidemic. Cullen
who gives the above definition considers the
disease depending upon a preternatural con-
struction of the colon, But that it is a bilious
disease caused by morbid action of the liver
may be inferred first from its occurring most
frequently in miasmatic countries, and appearing
in the ^{latter part of summer and} beginning of autumn; secondly from its
preceding and succeeding bilious fevers, and being
sometimes combined or complicated; thirdly
from a yellowness of skin often accompanying
the disease; and lastly from its being cured or
greatly relieved by a free discharge of bile either
by vomiting or purging.

Dysentery may be
caused by an increased secretion of bile or it
may be deficient. It remains to account for
these opposite states of the liver causing this
disease. It may be imagined that an excessive

quantity of bile of an acrimonious quality, will irritate the intestines and cause inflammation and subsequently spasm, producing gripes or tormina, or even allowing that it only produces a simple looseness of the bowels, it gradually washes off the mucus of the intestines, erodes their membranes and at last brings on severe gripes with bloody stools.

But the most frequent cause of dysentery is suppressed secretion and excretion of bile or its retention in the duodenum. That irritation in this part should cause pain & tenesmus in other parts of the alimentary canal is no more astonishing than that pain and itching should be felt in the glands penis from an inflamed urethra. Another view of the subject will also account for the production of tormina and tenesmus from a defective secretion of bile. The feces on reaching the large intestines,

are detained there for a long time and appear to undergo a degree of incipient putrefaction, evinced by the extrication of gases. The sacrements thicken, harden, and become formed or moulded in the cells of the colon, consequently if the bile be withheld, the sacrementitious matter acquires a peculiar acrimony; new products originate and morbidly stimulate the coats of the intestines, causing tenesmus and an increased discharge of mucus, frequently tinged with blood. The colon for want of the stimulus of the bile, cannot expel its contents, which from being long retained, act as a foreign body, which cause inflammation and oppression.

After what has been said it remains for me to enquire into the causes which have such influence on the liver, These I shall divide into those which act on the stomach primarily, and into those which operate secondarily. In the first place it generally occurs in Marsh Miasmatic coun-

tries, where this effluvia is the most copious, & active, in conjunction with the vicissitudes of the weather, and exposure to a moist, vitiated atmosphere. This taken into the stomach produces irritation of that organ, and of the duodenum, which disorders the biliary apparatus. Secondly it may occur from a sudden suppression of perspiration. We all know there is great sympathy between the skin and alimentary canal and particularly the liver. In looking over Johnson on tropical climates, a work highly recommended by Dr Chapman, he says that in every case of Dysentery which came under his notice, two functions were deranged, these were the skin & liver, where it arose from the skin, there were cold clammy sweats, and where the liver was disordered, there were biliousordes discharged.

As dysentery often precedes or succeeds the fevers of our climate produced by miasm effluvia, it

is often combined and puts on the different forms of Intermittent, and continued, and from this last it often sinks into the typhus form - which however is not often the case except when it occurs in low and crowded situations. This disease has by many been considered contagious, but the mode in which it is propagated more resembles that of a complaint attacking a number of individuals all exposed to the same exciting cause, and when the febrile symptoms are communicated by contagion, the dysenteric symptoms are so likewise. Some have considered the contagion to arise from the filth of the patients apartment, from feces and urine, remaining long in his chamber. But if this were the case Dr Chapman thinks ^{it would} be the same with every other disease and that dysentery would be taken where the greatest attention is paid to cleanliness. When it is

imparted from one person to another, it is done in a direct manner by contagion, which is secreted in the typhus state. Though it operates in this way I believe it to be very seldom, and that its general character is that of an epidemic.

The symptoms of this disease from what has formerly been said will now be the ^{next} subject of this essay. It comes on as an acute disease; but often degenerates into a chronic form, in this case there is decayed appetite dryness of skin, sunk features, a livid yellow complexion, great weakness and emaciation. It generally commences with a loosening of the bowels, which will sometimes continue for a day or two without any fever attending, after which it is succeeded by a slight chill, with some degree of fever, flushings of the face, hot and dry skin, pulse full and frequent though sometimes

quick and corded, fixed tongue, griping pains
in the bowels, followed by tenesmus. In the com-
mencement of the complaint there is often nausea
and vomiting of bilious matter, together with
tormina and tenesmus the sufferings of the patient
is very much aggravated whenever he attempts to
make any exertion, and the most easy and com-
fortable position is when he is warm in bed. The
patient has frequent desire to go to stool, tho' little
is voided except mucous sometimes streaked with
blood, together with the sanguine appearance
there is frequently discharged membranous fila-
ments, as it were the abrasion of the intestines,
sometimes the evacuations are of a thin watery
consistence, or of a bilious nature or appear
like the washings of meat. As the disease ad-
vances, it becomes more and more developed and
every time the patient has a stool or a desire
to void the contents of the bowels, he feels as

though the intestines were descending, and not infrequently prolapsed ani, &c. occur, that this is more frequent in children than in adults. In addition to the above remarks cases are related by Sydenham that there were no discharges at all, and that this arises from the inflammation, transcending the secretory action. If this view of dysentery be correct, the indications of cure are sufficiently obvious. The remedies here pointed out are those which are calculated to remove inflammation, with the morbid irritation, to procure a free discharge of the contents of the bowels, and restore the skin to its healthy action. Here the lancet is the first remedy to be resorted to, and is clearly pointed out by the symptoms attending, and is at the present time generally employed. Early resorted to, it checks the inflammation and opens the susceptibility of the system to other remedies.

Emetics by the early writers were indiscriminately employed, and at the present time ^{are} frequently indicated by the nausea and sickness of stomach together with a furred tongue. The next remedies which claim our attention are purgatives. Much has been said with regard to the ones which should be employed, whether those of a mild nature or those which operate freely on the bowels.

Cullen says that the most gentle laxatives are the most safe. But if gentle laxatives ~~are~~ should not produce the evacuations, some powerful medicines must be employed, and I have "says he" found nothing more proper or convenient, than Antimony given in small doses, and at such intervals as may determine their operation to be chiefly by stool. But the purgatives which are generally employed are those which operate pretty freely, and the one I have seen most frequently used is Calomel alone.

or in combination with some other of the
class of purgatives, and after evacuating the
bowels in this way employ castor oil to keep
the bowels in a soluble state. The frequent and
severe griping attending this disease, leads al-
most ~~indisputably~~ necessarily to the use of opiates, but
I have never seen them tried thus early in
the complaint. But to calm irritation, and
promote evacuations, injections have been given
with the happiest effect. After promoting free
discharges by stool, we should endeavour to
excite perspiration by mild diaphoretics, and
to answer this purpose Calomel, opium and
Spasmodic answers an excellent purpose
given in small doses combined, This while it
produces its diaphoretic effect, keeps the bowels
open and allays irritation. Spasmodic alone
has been highly extolled especially in those cases
accompanied with discharges of blood. To

promote the diaphoretic effect of these remedies, warm diluent beverages answer very well, such as flax seed tea, halm tea, water gourd &c great benefit is also derived from external applications such as bags of warm mush, bottles of warm water, cloths wrung out of warm water, or warm vinegar and water applied to the abdomen. Here the flannel roller, is very beneficial applied round the body and should envelop it completely. Much has been said of *Spica cuanha* alone as a diaphoretic, this has long been employed in the practice and highly extolled by many practitioners tho some give their testimony in favour of the antimonials but from the weight of authority I am disposed to give the preference to *Spica cuanha*. By Cullen and Sir George Baker it is said to act as a purgative, but by Mosely it is considered advantageous in dysentery by relaxing the surface and exciting diaphoresis. Two modes

have been employed in the administration of this remedy. By Clarke it is recommended in the shape of a clyster to be repeated twice or thrice in twenty four hours this I have never seen employed in this way and from very respectable authority we are taught that a decoction of *Spicacuanha* is wholly inert. Mr Hayfair gave it in drachm doses, combined with laudanum, tho' this is said to be more beneficial in the commencement of the attack where the pain has been great and the desire to stool frequent and ineffectual. Most writers agree as to the utility of blisters in this disease, differing however in relation to the part where the application is to be made, by some it is conceded that they increase the sufferings of the patient when applied over the abdomen, and give the cataplasms the preference, but from the nature of the disease, and from analogy

I am led to believe that when applied as near the seat of the complaint as possible, their beneficial effects are far superior to those applied to the extremities. In some cases of dysentery where the tormina and tenesmus continues for some time, and forms a great source of irritation opium answers very well in the form of injection or where there is much excoriation, a solid pill of opium introduced up the rectum, but the best injection is fresh butter or hog's lard, in this stage, I have seen it given in several instances with decided utility and while it calms irritation gently opens the bowels. Much has been said with regard to sugar of lead, in combination with opium, but I have never seen the former employed alone or in combination with the latter, and when given in this way I am much disposed to ascribe the beneficial effects produced to the opium. Of mercury urged to

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a salivation much has been said by different
writers, & that it has been employed with success
in this disease cannot be denied especially in
those cases where it produces a degree of prostration
and symptoms of a chronic nature, but in
the early stage we are called upon to reduce
vascular action by more active measures,
In the treatment of this disease it is necessary
and a very essential part to attend to the diet
of the patient, which should be of a mild
nutritious nature, and principally fluid,
which consists chiefly of demulcent drinks
of which are barley or rice water, mucilage
of Gum arabic, or of the slippery elm, sage,
arrow root, and chicken tea, and other articles
of an easy digestible nature.